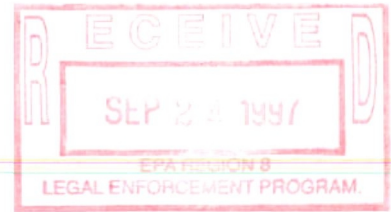




Collaborative Decision Resources

1071197 - R8 SDMS



MEMORANDUM

To: All members of the Sandy Smelter Site Working Group

Bonnie Lavelle	Nancy Mueller
Andy Lensink	Paul Rogers
Susan Griffin	Mark Day
Cliff Vaterlaus	Renette Anderson
Scott Everett	Laura Lockhart
Don Robbins	Jim Fricke
Linda Larson	Michael Thorp
Rob Jolley	Tom Dolan
Byron Jorgenson	Rick Davis
Scott Cowdell	Steve Osborn
Terry Sadler	Lori Jensen
Phil Glenn	Shane Pace

From: Louise Smart and Daniel Bowling (fax: 303-442-7442, phone: 303-442-7367)

Date: September 23, 1997

Re: July 30, 1997 Work Session Summary

Message:

Attached is the Draft Working Session Summary from our July 30 Working Group meeting. After distributing a second draft by fax last week, we received a few more comments, which provide clarification rather than substantive changes. These new corrections are underlined. Unless we receive any objections to the corrections, we will consider this draft as the final document. Please call or fax Louise or Daniel with any corrections by Tuesday, September 30. Thanks. After that date, we will finalize the Working Session Summary so it may become part of the official record.

**SANDY SMELTERS SITE FACILITATION
DRAFT WORKING SESSION SUMMARY
JULY 30, 1997 WORKING GROUP SESSION**

In attendance:

EPA: Bonnie Lavelle, Lori Jensen, Susan Griffin
UDEQ: Mark Day, Cliff Vaterlaus, Scott Everett
ASARCO: Don Robbins, Michael Thorp, Jim Fricke
City of Sandy: Byron Jorgenson, Scott Cowdell, Phil Glenn, Shane Pace, Rick Davis
SLCCHD: Terry Sadler
CDR Associates (facilitators): Louise Smart and Daniel Bowling

Report from each organization

Daniel Bowling reviewed the Working Group proposal that had been made at the June 26 meeting as a possible conclusion for the remediation program for historic Sandy (see page 6 of the June 26 Meeting Summary). He asked each organization to report to the Working Group on the results of discussions regarding this proposal with the management of the organization.

ASARCO: Don Robbins reported on the proposal to Mike Varner, Vice President for Environmental Operations. Mr. Robbins told Mr. Varner that although he still believes that data from the studies that were conducted on blood lead demonstrate that there is no health risk, this proposal came from the facilitated process and that some parties think that additional clean-up is needed. Mr. Robbins recommended to his management that, in the interest of reaching closure on the site, clean-up to the 1800 level be approved. Mr. Varner approved this recommendation.

EPA: Bonnie Lavelle explained that the decision rests with Max Dodson in Denver. Currently, Mr. Dodson is willing to sign an action memo which sets a clean-up level of 1800 for this project. There is a consultation process for EPA: representatives from all 10 regions will meet in a conference call to comment on the Sandy decision. This conference call constitutes the HQ review process that is required if an action level of 1800 is used. Ms. Lavelle will prepare a package that describes the risk management strategy, the proposal, and any supporting information, including a statement of support from the Working Group. The consultation process is strictly informational and is not designed to produce a recommendation; Region 8 has the authority and will make the final decision. However, there is a slight risk that in the consultation process someone may say something which may change Mr. Dodson's mind. The consultation process helps all the regions remain informed about the reasons for decisions; there is no written record from this telephone meeting. Ms. Lavelle will prepare the action memo for Mr. Dodson to sign following the conference call, which will probably occur in September. Susan Griffin is preparing an analysis of the risk remaining at the Sandy site at clean-up, using the assumption of clean-up at the 1800 action level.

Ms. Lavelle described a meeting that occurred in Denver the previous week. A group of EPA scientists met to review the IEUBK model. During the meeting, they talked about the Sandy site and examined all the assumptions that went into the model. No problem emerged at this meeting which would alter the decision to use an 1800 ppm action level.

City of Sandy: Byron Jorgenson said that the City Council reviewed the proposal. In light of the studies conducted by the University of Cincinnati and that Salt Lake City County Health Department, the City Council does not feel there is a risk to Sandy citizens. Mr. Jorgenson told the City Council that at least 13 and perhaps as many as 67 properties would be cleaned up. The City Council voted in favor of this proposal and would be happy to write a letter of support for an action memo based on this proposal. The City Council hopes that the EPA and ASARCO will study the 54 lots which have contamination at 18 inches and reduce the number of properties that need to be cleaned up, if possible.

Following this statement of the City Council position by Mr. Jorgenson, there was discussion regarding institutional controls. The proposal states that there will be no institutional controls except on City-owned land. Ms. Lavelle said that the number of properties requiring clean-up could be reduced if institutional controls were placed on commercial or industrial properties. However, those properties would need to remain commercial or industrial to ensure that exposures remained at acceptable levels. Scott Cowdell, City Council member, stated that the City would have no problem with putting institutional controls on commercial lots. Mr. Cowdell explained that it is a legal right of a property owner to seek a re-zoning change and that future City Council members may change the designated land use. However, the City can flag these properties and require that if the land use changes in a way that is not acceptable according to this agreement, the soil will be addressed to ensure continuing protectiveness. (**NOTE: this section was simply moved**). The Working Group agreed that the goals would be to restrict uses (such as day care (centers) which involve children, to prevent the moving of fill off-site, and to provide worker safety to protect them from any "hot spots" on the property. In this way, the City can ensure that the City will adhere to the standards that EPA places on these properties. Scott Everett explained that a formal letter of commitment from the City, stating these restrictions, would need to be included in EPA's risk management paper. This City agreed to provide such a letter.

It was clarified that control on land use will occur through the zoning and permit process and will not be part of the title or deed. The goal is to not create problems for owners with lenders or purchasers and to prevent any cloud on the title or otherwise.

Salt Lake City/County Health Department: Terry Sadler explained that the SLCCHD sees its role as an advisor to the City on health conditions, rather than as a signer to any agreement. Based on the University Cincinnati study and the WIC study, the SLCCHD believes there is no demonstrated risk. As a result, the advice of the SLCCHD to the city is to support this proposal.

Utah Department of Environmental Quality: Mark Day explained that when UDEQ staff presented the proposal to management, there were a couple of concerns. He said that the mission of UDEQ is to protect human health and the environment and that UDEQ wants to make sure that the remediation is appropriate for the safety of the citizens and the environment. UDEQ management does not draw a direct correlation between the blood lead studies and environmental contamination in determining what should be done to clean up contaminated soils. UDEQ puts more emphasis on the IEUBK model to inform them about what to do, in order to determine what would be an appropriate clean-up action. **(NOTE: This section was simply moved).** The UDEQ needs to take into account the uncertainty and bias that is inevitable in such a model and try to apply the predictions of the model to reality. The prediction of the IEUBK model is a range of 890 ppm to 1800 ppm. Although there are arguments that say that the risk is the same between those two points, nevertheless an action level of 1800 ppm is at the upper range of the model. Other states are using action levels at or near 500 ppm. Mr. Day said that UDEQ would support the 1800 action level under the following conditions:

- If the EPA can get the confirmation from EPA headquarters of support for the 1800 action level, following the consultation process, and can present proper justification for this level
- If the EPA can obtain properly applied institutional controls on commercial properties (including working safety controls)
- If the EPA can issue clean letters on the properties that are cleaned up and state that the rest of historic Sandy is clean
- If good, sound technical decisions are made to reduce the numbers of properties to be cleaned up (such as by addressing zones of contamination within properties)

UDEQ is concerned about worker safety. On properties where contaminant levels exceed standards and construction is involved, contractors need to have 40 hours of training if they dig up the soils. OSHA rules state that the property owner must put the worker on notice. UDEQ is concerned that there may be a pocket of contamination on site that is not currently identified. UDEQ would like to have some kind of documentation, stating that historic Sandy is clean and that environmental concerns have been resolved. This statement needs to be accessible to property owners and lending institutions. Ms. Lavelle responded that the decision document will identify the action that will be taken and will state that this action will be protective.

Mr. Day noted that access was not allowed on a couple of properties and that EPA does not know the level of contamination on these properties. Ms. Lavelle suggested looking at current information and trends to determine potential contamination.

Mr. Day raised the question of arsenic on the site. In order to complete the project and state that there is no public health threat, arsenic over 400 ppm should be cleaned up, as well as the lead contamination. Discussion of potential arsenic on the Sandy site included:

- The risk assessment on the site states that arsenic levels are within the range of acceptable risk.
- Since EPA set an action level of 400 ppm for arsenic at the time of the initial clean-up efforts in Sandy, the properties with arsenic levels over 400 ppm may already have been cleaned up.
- The clean-up of the remaining lead-contaminated properties may take care of any remaining arsenic contamination.
- There were no specific arsenic production facilities in the three smelters in the Sandy site.

The Working Group agreed to cross-check the data to ensure that all properties with arsenic above 400 ppm are cleaned up. A review of the data, later in the meeting, showed that there were 7 samples on 6 properties where the arsenic was over 400 ppm. Of these, one property has already been cleaned up; two properties have been proposed to be cleaned up to address lead contamination. The three remaining properties need to be addressed (#230, #455, and #509); on these properties, the arsenic count ranges from 800 ppm to 1400 ppm on the surface. Since eleven commercial properties will be subtracted from the 67 properties potentially requiring clean-up for lead, these three properties may be cleaned up for arsenic without increasing the number of properties beyond the 67 approved in the proposal.

The Working Group took a break, during which time UDEQ and EPA met to discuss particulars of remediation at the 1800 action level. The agreements reached during these discussions included:

- By the process of design characterization, a suite of samples will be reviewed to formulate an opinion on clean-up requirements for each of the 67 properties; where insufficient sampling is available, some additional but limited sampling will take place. It is possible that additional properties will be eliminated from the list of those which need to be cleaned up.
- UDEQ recognizes that EPA will make the decision on remediation and the use of management tools. EPA will be prudent in its use of management tools, such as tilling and the sod rule. EPA will provide clear justification for its decision to use any of these tools and for its decision on whether or not to clean up an individual property in the list of 67 properties currently identified as over 1800 ppm.

Ms. Lavelle explained that the EPA would like future feedback in order to evaluate whether 1800 was the appropriate action level at this site. She inquired whether the SLCCHD would continue its blood lead study in the future. Terry Sadler explained that the WIC study was a one-shot study to canvass the entire county to determine whether there was a potential problem and where to target efforts. Since Sandy test results did not indicate a problem, the SLCCHD will target its efforts elsewhere, and there is no anticipated further blood lead study for Sandy. Ms. Lavelle assured the group that monitoring is not part of the proposal and that she was not suggesting that additional studies be undertaken; rather, she was expressing interest in any studies that were

going to be conducted under other programs. Mark Day noted that for any study to be meaningful, it would have to replicate the type of study done earlier (for example, it should be very similar to the University of Cincinnati or the WIC study) in order to determine the change that has occurred. Terry Sadler expressed concern about the validity of future blood lead studies unless a control group is established. Don Robbins noted that blood lead sampling has not been used at any other site to determine whether the remedy is effective. Jim Fricke suggested that it would be useful to apply the IEUBK model to calculate the risk after clean-up occurs at the 1800 action level.

Letter of Support

The Working Group drafted a letter of support for Bonnie Lavelle to present as part of her action memo on the Sandy site. The following is the draft approved by the Working Group. Group members will ask their management to review and approve this letter. If there are any problems or concerns, Group members will contact Ms. Lavelle.

STATEMENT OF SUPPORT

A Working Group, comprised of representatives from ASARCO, EPA, City of Sandy, and Utah Department of Environmental Quality, met to consider how to deal with properties on the historic Sandy site. The Working Group reached the following conclusions:

1. Based on EPA's explanation of the Sandy Smelters site risk assessment and given the results of the blood lead tests within Sandy City showing no child exceeding 10 ug/dl, the Working Group supports an 1800 ppm action level. The City of Sandy, the Salt Lake City/County Health Department, and ASARCO believe that the blood lead studies have not demonstrated a health risk; however, they are willing to support the 1800 action level.
2. Given the lack of a demonstrated health risk for their citizens, the community leaders expressed a strong desire for closure on this site and minimization of disruptive impact on its citizens.
3. UDEQ, the City of Sandy, and ASARCO expect that proper implementation of the 1800 ppm lead action level would constitute completion of the remediation of the Sandy Smelters site.
4. UDEQ, the City of Sandy, and ASARCO recommend that EPA prepare all necessary documentation to release any restrictions on the entire site and to remove any stigma from this site associated with the clean-up.

Signatures: (to be signed by each organization)

Through the facilitated discussion process, the Working Group made the following recommendations to EPA:

1. The 1800 ppm action level potentially impacts 67 properties, including 13 yards where the surface soil is greater than 1800 ppm lead concentration and up to 54 yards where the subsurface contamination for lead is greater than 1800 ppm.

2. EPA will use a suite of samples to formulate an opinion on clean-up requirements for each of the 67 properties; it is possible that additional properties will be eliminated from the list of those will require soil removal. EPA and UDEQ officials will work with ASARCO engineers to examine carefully each potential property to determine how many properties need to be remediated and to what extent.
3. Commercial properties and city-owned properties will not be remediated by soil removal. However, Sandy City agrees to place institutional controls on those properties, which will include:
 - Restrictions against soil removal except by following EPA and UDEQ guidelines
 - Flagging properties in City records so that any re-zoning application will take into consideration the lead levels in soil and land use applied for; future land use changes to uses which are not acceptable may require soil removal by the property owner
 - Restrictions against any use which might involve children on property, such as child care facilities.
 - Institution of worker safety rules to protect them from health hazards from any "hot pockets" on site which would violate OSHA regulations
4. No institutional controls will be placed on residential properties.
5. Prudent consideration will be given to risk management practices which may lead to less than 67 properties being remediated with careful consideration of sod rule and tilling rule and remediating only certain zones within a property rather than removing the soil of the entire property. EPA will provide justification for the use of any of these management practices.
6. Re-sampling will be done during the design phase, which may lead to the elimination of some properties or the addition of some properties; however, given the elimination of 11 commercial properties, the total properties subject to remediation through soil removal will not exceed 67.
7. Remediation through soil removal, based on the above, will complete closure for the Sandy site without the use of community protective measures.
8. Based on the above actions, EPA will prepare any necessary documentation to release any restrictions on the entire site.

Next steps:

Bonnie Lavelle will mail the Statement of Support in letter form to each of the organizations represented on the Working Group for signature.

The EPA consultation process has not yet been scheduled but is expected to occur in September. Mr. Dodson will make a final decision following that conference call. Ms. Lavelle will contact the Working Group when Mr. Dodson has signed the action memo.

Following the finalization of the action memo, EPA will begin the design process. Remediation construction is expected to occur in summer, 1998.